

RECREATION REPORT

Sisters Ranger District

Deschutes National Forest

November 4, 2014

MELVIN BUTTE PROJECT

Prepared by: /s/amyracki
Amy Racki
Recreation Team Leader

Date: 08/27/2015

Introduction

This report addresses the effects of the proposed Melvin Butte Vegetation Management Project on the existing social character and condition (setting), as well as on recreation opportunities and experiences for the area. This report supports the analysis and conclusions of the Melvin Butte environmental assessment.

The primary recreation activities and opportunities that occur within the Melvin Butte project area is winter recreation use including cross-country skiing and snowmobiling. The area also includes Forest Road 16 which provides access to a popular summer and winter recreation area south of the project area. There are no non-motorized/summer trails and limited dispersed camp sites known in the project area. There is some evidence of unauthorized off-road recreational all-terrain vehicle use in the project area.

Vegetation management activities such as tree thinning, group openings, mowing of shrubs, prescribed burning, and reforestation may affect recreation areas and access routes. Changes in road status (closure or decommission) may affect recreational activities within the project area.

There is one outfitter and guide in the project area and recreation events. Occasional group use activities may be authorized within the project area, but are infrequent and non-recurring. Permit holders typically use the two developed snow-parks and Forest Road 16 within the project area.

Regulatory Framework / Management Direction

Management Plans

Management direction is contained in the Deschutes National Forest Land and Resource Management Plan (LRMP), as amended. Recreation activities within the project area occur in lands designated for MA-18 Front Country and MA-9 Scenic Views. The LRMP also provides standards and guidelines for Trail System Management which also applies to trails within the project area. The LRMP was amended in 1994 by the Northwest Forest Plan which further allocated the Scenic Views (MA-9) and Front Country (MA-18) Management Areas as Matrix.

MA-9 Scenic Views (includes Upper and Lower Three Creeks Snow-Parks; FSR 16, and Cross-District and Three Creek Lake XC Trails)

MA-9 Goal/Theme The overall goal for MA 9 is “To provide Forest visitors with high quality scenery that represents the natural character of Central Oregon” (LRMP 4-121). The general theme and objectives of Scenic Views is for landscapes seen from selected travel routes and use areas to be managed to maintain or enhance the appearance of the areas being viewed. To the casual observer, results of activities would either not be evident or would be visually subordinate to the natural landscape.

MA-9 Standards and Guidelines

M9-1 New recreational developments and changes to existing developments are permitted as long as they are consistent with the desired visual condition. When viewed from significant viewer locations, recreational facilities will meet the established visual quality standards. For viewer locations within the recreational development being viewed, established visual quality standards may not always be met.

MA-18 Front Country (includes portions of the Triangle Tie and Triangle Hill Loop snowmobile trails)

MA-18 Goal/Theme The overall goal for MA-18 is “To provide and maintain a natural appearing forested landscape on the slopes northeast of the Three Sisters and Tam MacArthur Rim while providing high and sustainable levels of timber production”.

MA-18 Standards and Guidelines

M18-18 New recreational developments and changes to existing developments are permitted as long as they are consistent with the desired visual condition.

M18-21 Traditional informal campsites, hunter camps, or areas where concentrated recreation use occurs will be recognized as being significant in producing and utilizing dispersed recreation opportunities. Prescriptions for harvesting, cleanup, site preparation, and thinning will consider the environmental setting that contributes to the attraction of these sites for recreation purposes. The attempt will be made to retain this attractive character during and after treatments.

Forest-wide: Trail System Management

Goal To maintain the existing trail system and provide additions or modifications to the system which will meet the increasing and changing demands in dispersed recreation. To the extent possible this system will provide trails of all difficulty levels, trails in visually appealing settings, and trails for those modes of travel appropriate for the Forest in both winter and/or summer.

TR-3 Trails will be located or relocated whenever possible where they will not be disrupted by developmental activities such as logging or road building. Where disturbance of a trail cannot be avoided cleanup should be concurrent. Reassurance markers and signing will be maintained to avoid inconveniencing trail users.

TR-6 Volunteer groups and individuals will be encouraged to maintain and construct parts of the trail system.

TR-21 In addition to winter use of OHV's, the Forest will provide additional opportunities for summer use of OHV's and other OHV's such as motorcycles. Part of the Forest service road system that is not maintained for public use and that is not involved in logging operations may be opened for this use.

TR-25 The trail will coexist in harmony with all other uses and activities of the land as determined through the land management process.

TR-26 When resource activities occur immediately adjacent to or across the trail the integrity of the trail proper will be protected by modified management practices as needed.

Travel Management

In accordance with the Deschutes National Forest and Ochoco National Forest and Crooked River National Grassland Final Environmental Impact Statement and Record of Decision (8/4/2011), summer-time motorized access off of the open designated road system (cross-country travel) is, with some exceptions, prohibited. Exceptions include over-snow vehicles (winter only); and motorized access for emergencies or authorized by permit. The Deschutes and Ochoco National Forests Motor Vehicle Use Maps (2011) prohibit motorized access off designated roads and establishes access conditions for dispersed camping. Summer motorized use for both highway legal and non-highway legal vehicles is currently allowed on most Maintenance Level 2 roads within the project area (See Roads Analysis report). Conditions of use established by these new regulations are considered part of the existing condition for the Melvin Butte project.

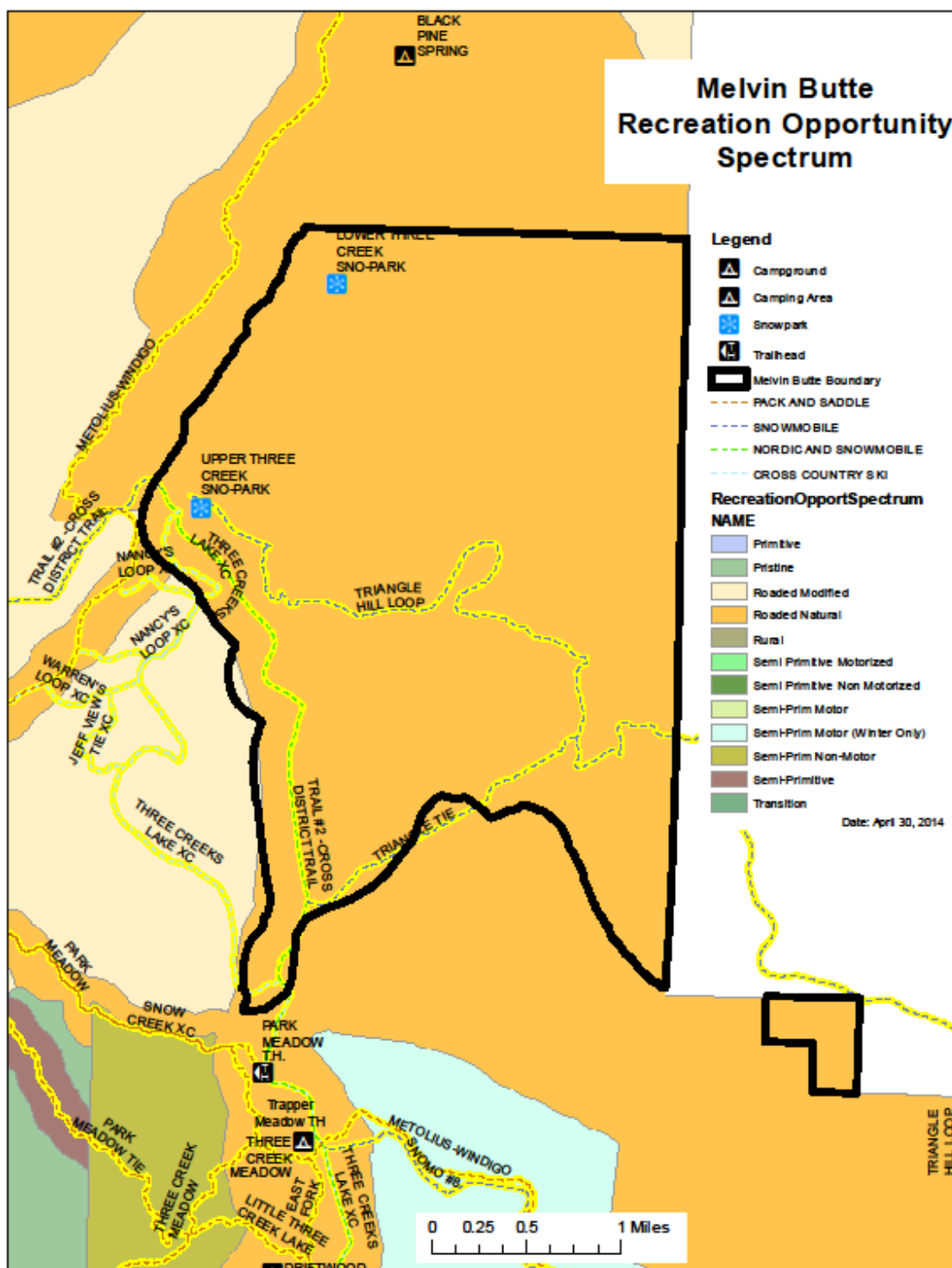
Recreational Opportunity Spectrum

The Recreation Opportunity Spectrum (ROS) is a description of various attributes that contribute to a particular recreational setting. The ROS describes recreational settings in terms of the, “combination of physical, biological, social, and managerial conditions that give value to a place.” (Clark and Stankey (1979). Map R-2 Recreation Opportunity Spectrum shows the ROS settings for the project area. The ROS settings that apply to the Melvin Butte project include:

Roaded Natural – This is the setting for most (>99%) of the project area. “The area is characterized by predominately natural-appearing environment with moderate evidence of the sights and sounds of humans. Such evidence usually harmonizes with the natural environment. Interaction among users may be low to moderate, but with evidence of other users prevalent. Resource modification and utilization practices are evident, but harmonize with the natural environment. Conventional motorized use is provided for in construction standards and design of facilities. Large mammals tolerant of humans may be present; those not tolerant present infrequently. There is a prevalence of smaller species.” (Deschutes National Forest LRMP, Appendix 2-1)

Roaded Modified – This is a very small portion of the project area (< 1%) and does not contain any recreation resources.

Map – Recreation Opportunity Spectrum



Analysis Methods

Direct, indirect, and cumulative effects to recreation resources were analyzed by determining the degree of disturbance directly associated with the different types of proposed activities, any secondary effect indirectly associated with the proposed action, and the cumulative effects of all actions affecting the resource within the area of potential effect.

A. Analysis Assumptions and Methodology

The analysis of effects of the action alternative is based on the following assumptions:

- A. Detailed descriptions of the proposed action and alternatives are included in Chapter 2 of the Melvin Butte EA. Effects of the alternatives are based on those descriptions.
- B. Public access to the Three Creek Recreation Area via FSR 16 would be allowed during the operational period.
- C. FSR 16 would not be used for vegetation management operations during the winter recreation season (snow dependent from November to May) from the Upper Three Creek Sno-Park to the southern end of the project boundary. An alternate route using FSR 1628 and 1620 would be used. Portions of FSR 1628 are also used as the Triangle Tie and Triangle Hill Loop snowmobile routes. Winter recreation on these roads/trails would temporarily be closed on these snowmobile trails.
- D. Within the project boundary, FSR 16 would not be used during the summer recreation months (snow dependent from June to October) on holidays or weekends for vegetation management operations.
- E. Public safety concerns resulting in public access would be mitigated as deemed necessary by the Forest Service.
- F. Effects of the action alternative is based on the assumptions that the following recreational resource project design criteria would be incorporated:

Project Design Criteria

To avoid significant disruption of the current valued scenery and recreation experience:	
Whenever possible, landings, slash piles, and other discordant visual evidence of harvest and treatment activities should not be visible from sno-parks facilities following completion of operations. (M9-1, M18-18)	Sno-parks (Units 109 and 39)
Do not approve long-term storage of bundles or decks where they would affect the function or use of the sno-parks. (M9-1, M18-18)	Sno-parks (Units 109 and 39)

To avoid, minimize or reduce impact to recreational use and safety:	
Avoid creating sharply diverse vegetation conditions immediately adjacent to sno-parks. Emphasize a “natural” look of the forest as viewed from the sno-parks. (M9-1, M18-18)	Sno-parks (Units 109 and 39)
Do not approve slash piles or storage of decks along trails that may create a hazardous situation for snowmobile users. For example, a slash pile covered by snow may appear to be a small hill/obstacle to a snowmobile user, not an unstable slash pile. Mitigate these hazards as necessary. (Forest-wide Standards and Guidelines, TR-3)	Units: 4, 10, 12, 28, 31, 35, 39, 40, 41, 42, 44, 48, 49, 50, 56, 57, 72, 76, 85, 86, 87, 90, 108, 110, 113, 114
During tree-marking, or tree or brush removal activities within 300 feet of sno-parks, coordinate with recreation staff to emphasize retention and improvement of natural site-defining features. Site boundaries for designated sno-parks are defined by trees, brush, rocks, or down logs. This helps define the edge of where parking is allowed. Maintaining this vegetation entirely or partially or replacing these site-controlling features is critical to future effective site management. (M9-1, M18-18)	Sno-parks (Units 109 and 39)
Retain trees that hold signs (including diamonds that mark winter trails). Replace trail signs that may be damaged or removed during project operations. (Forest-wide Standards and Guidelines, TR-3)	Units: 4, 10, 12, 28, 31, 35, 39, 40, 41, 42, 44, 48, 49, 50, 56, 57, 72, 76, 85, 86, 87, 90, 108, 110, 113, 114
Whenever possible, in accordance with this EA, remove hazard trees within a tree length near sno-parks. (FSM 2332)	Sno-parks (Units 109 and 39)
To avoid indirect, unintended disruption or modification of recreation activities or unintended impact from recreation activities on other resources following completion of treatment activities:	
Painted trees should not be visible from sno-parks within a reasonable time period following completion of project activities. Techniques to accomplish could include, but are not limited to, favoring blue paint marking techniques where possible to mark ‘take’ trees rather than ‘leave’ trees for units containing or adjacent to sno-parks, or removing leave tree paint within sight of sno-parks. (M9-1, M18-18)	Sno-parks (Units 109 and 39)
Avoid creating vegetative conditions that would facilitate creation of	Sno-parks (Units 109

<p>unauthorized trails, or that would facilitate unauthorized motorized access from Forest Road 16 or Sno-parks. (M9-1, M18-18)</p> <p>Place boulders (preferred) or other natural features bounding sno-parks to deter cross-country travel.</p>	<p>and 39)</p> <p>Forest Road 16</p>
Obliterate unauthorized travelways adjacent to the sno-parks. (M9-1, M18-18)	Sno-parks (Units 109 and 39)
Ensure that temporary roads used for project administration do not become future unauthorized trails by effective obliteration after use.	See Transportation Effects Analysis
To ensure that there is no inadvertent effect to use of designated snowmobile routes, to the extent that snowplowing is needed during the operating period:	
Assure snow berms created by snowplowing activities do not coincide with winter recreationist routes that create a hazard for snowmobile groomers or recreational users. Coordinate trail closures with the recreation staff.	<p>Forest Road 16</p> <p>Units: 4, 10, 12, 28, 31, 35, 39, 40, 41, 42, 44, 48, 49, 50, 56, 57, 72, 76, 85, 86, 87, 90, 108, 110, 113, 114</p>
In order to avoid surprises to recreational users of the area:	
Provide information about timing and location of treatments on websites and at the sno-parks, including information on specific trail or area closures.	Sno-parks (Units 109 and 39)
To avoid, minimize or reduce impact to special use operations:	
Coordinate with the special use administrator to identify recreation events permitted for the season. Coordinate conflicts with timing and location.	<p>Forest Road 16</p> <p>Sno-parks (Units 109 and 39)</p>
Do not use Upper Three Creek Sno-Park as a staging area as it receives heavy use and serves as a temporary office location for Three Creeks Backcountry outfitter/guides under special use permit by the Forest Service.	Sno-park (Units 109 and 39)
To avoid significant disruption of the Three Creek recreation area south of the project area:	
Implement traffic control and safety measures on Forest Road 16 during summer recreation use as necessary.	Forest Road 16

B. Key attributes that contribute to the recreational value of the area

The key attributes that contribute to the recreational value of this area that would be affected by proposed Melvin Butte project activities include scenery from recreational infrastructure; timing and access to recreational activities and permitted special use activities, public safety, and revenues that could be affected by the changes from the proposed action and alternatives.

Scenery – How might scenery as viewed from the sno-parks and trails, and FSR16 be changed by the proposed actions? How does that affect the physical recreational setting and people's perception of the "natural" quality of their recreational experience? (See Scenic Views Analysis)

Access – What kind of access (motorized or non-motorized) is affected by the project, what is the timing or season when recreational access may be affected, and what access to what facilities or opportunities may be affected? How might changes in access affect user convenience and recreational opportunities, or access for facility maintenance?

Safety – How might the proposed project affect the public's safety, including ingress and egress to the Three Creek recreation area south of the project area?

Existing Condition

The Melvin Butte project area includes developed sites, including two sno-parks, groomed snowmobile trails, cross-country ski trails, and roads (Map 1). There are no non-motorized/summer trails or inventoried dispersed camping sites in the project area. There is some evidence of dispersed recreation such as camping that occurs in the area.

Within the project area is the Upper and Lower Three Creek Sno-Parks and 10.55 miles of winter ski and snowmobile trails (Table 1 and 2). Lower Three Creek Sno-Park receives limited use in the summer, and has not been plowed or received use in the winter for more than 5 years. The Upper Three Creek Sno-Park is heavily used in the winter and gated closed in the summer. Many snowmobile and ski trails originate from the Upper Three Creek Sno-Park. The Triangle Hill/Tie complex of snowmobile trails inside the project area offer winter snowmobile opportunities and receives limited use and has not been groomed for the past 5 years due to poor snow conditions. The Triangle Hill/Tie complex connects to Snowmobile Trail #8 outside of the project area. A small portion of the Three Creeks Lake XC trail originates from Upper Three Creek Sno-Park inside of the project area and connects to a system of cross-county Nordic ski trails west of the project area.

During the winter Forest Road 16 is gated from around November to May (snow dependent) and converts to a popular groomed snowmobile and cross-country ski trail. These trails connect to the Cascade Lakes snowmobile trail complex, outside of the project area.

During the summer Forest Road 16 provides access to the Three Creek Lake Recreation Area, an intensive recreation area south of the project area for summer activities such as overnight camping, hiking, lakeside day use, non-motorized boating, and riding horses. FSR16 also provides access to Three Sisters Wilderness trailheads during the summer.

Three Sisters Backcountry Incorporated uses the Upper Three Creek Sno-Park as a temporary office location under special use permit by the Forest Service. They offer avalanche courses and outfitter services for backcountry ski huts. Other special uses in the area include recreation events such as cycling on Forest Road 16, Boy Scout adventure race and training events near the sno-parks. The Upper Three Creek Sno-Park is closed during the summer unless permitted for a special use. The Lower Three Creek Sno-Park remains open. Another special use, non-recreational, is the Snow Creek Irrigation Ditch which is no longer in use with no valid water rights on file within the eastern portion of the project boundary (Forest Road 480). See Table 3 for Special Use permits in the project area.

Dispersed recreation opportunities that may occur in the project area, besides use of the winter trails already mentioned, include driving for pleasure, birding, hunting, and other types of dispersed activities.

Although there are no designated summer trails in the project area, the Metolius-Windigo Trail and Petersen Ridge Mountain trail systems receive heavy mountain biking and equestrian use and are located the west and northeast and of project area.

Within project area, the primary facilities that are used by recreationists in the area and are likely to be affected by the proposed action and alternatives are:

- Upper and Lower Three Creek Snow-Parks
- Forest Roads 16 and other portions of the roads system provide snowmobile and cross-country ski trail opportunities
- Outfitter and Guide operations, and recreation events permitted
- Snowplow and facility maintenance operations at the Sno-Parks
- Motorized-access to undocumented dispersed recreation opportunities along Forest Roads (driving for pleasure, birding, hunting, target shooting)

Outside of the project area, the primary facilities that are used by recreationists in the area and are likely to be affected by the proposed action and alternatives are:

- The Metolius-Windigo trail west of the project area
- Forest Road 16 access to Three Creek Lake recreation area and trails south of the project area

Table 1: Developed Sites in Melvin Butte Project Area

Facility Name	Facility Type and Capacity	Management Area
Upper Three Creek Sno-Park	70 car parking capacity	Scenic Views
Lower Three Creek Sno-Park	70 car parking capacity	Scenic Views

Table 2: Trails in Melvin Butte Project Area

Trail Type	Name	Miles of Trail Within Project Area	Total Trails Miles (within and outside of project area)	Deschutes LRMP Management Area/NWFP Allocation
Snowmobile	Cross-District Trail	3.03	38.95	Scenic Views/Matrix
Snowmobile	Triangle Hill Loop	5.16	15.6	Scenic Views/Matrix, Front Country/Matrix
Snowmobile	Triangle Tie	1.34	1.7	Scenic Views/Matrix, Front Country/Matrix
Total Snowmobile		9.53	56.25	
X-C Ski	Cross-District Trail	(3.03*)		Scenic Views/Matrix, Front Country/Matrix
X-C Ski	Three Creek Lake XC	1.02	5.5	Scenic Views/Matrix Front Country/Matrix
Total X-C Ski		1.02	5.5	

Grand Total		10.55	61.75	
--------------------	--	--------------	--------------	--

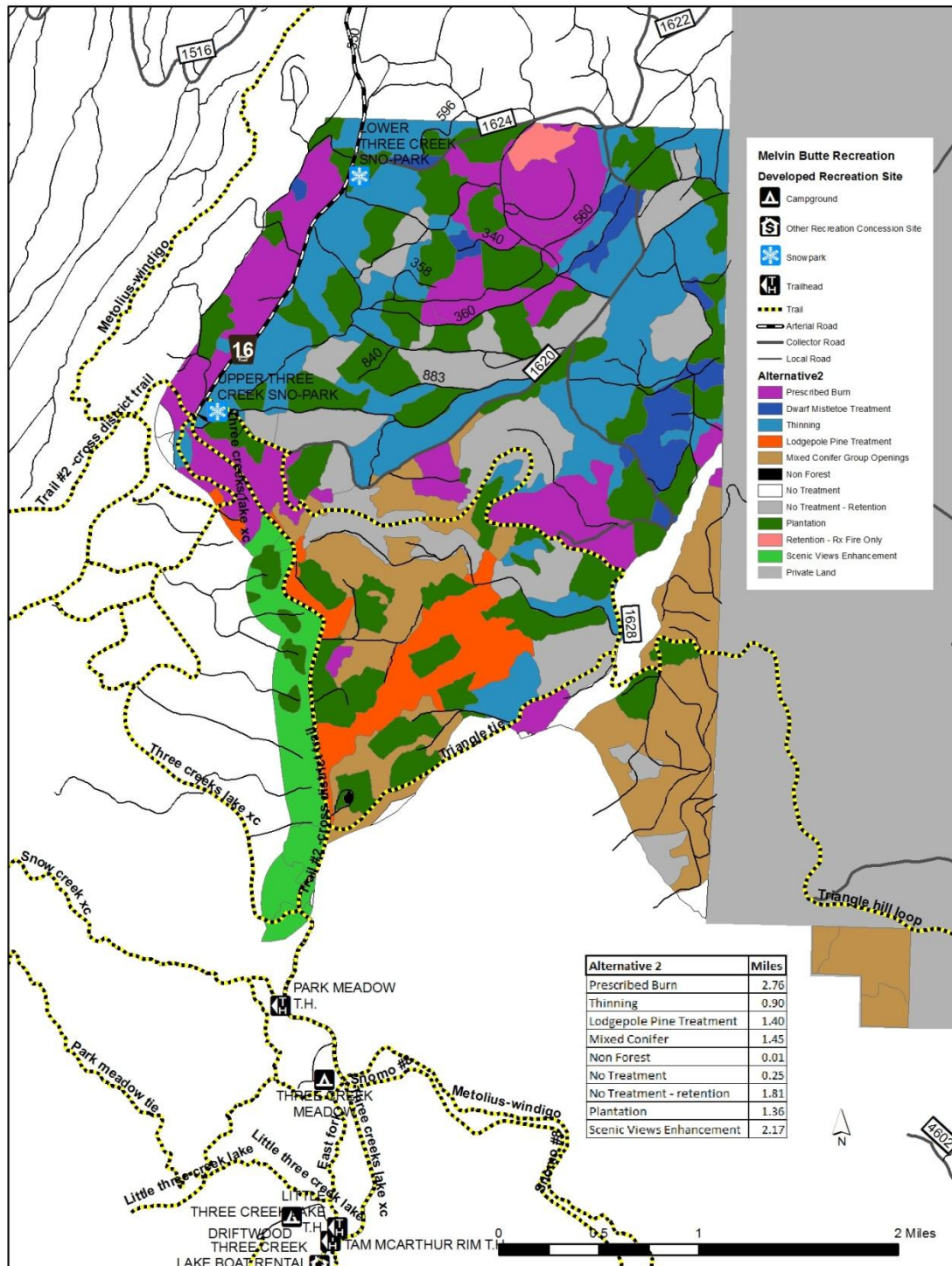
*Mileage not included in "Total X-C" as this trail mileage was accounted for under the snowmobile.

Table 3: Special Uses in Melvin Butte Project Area

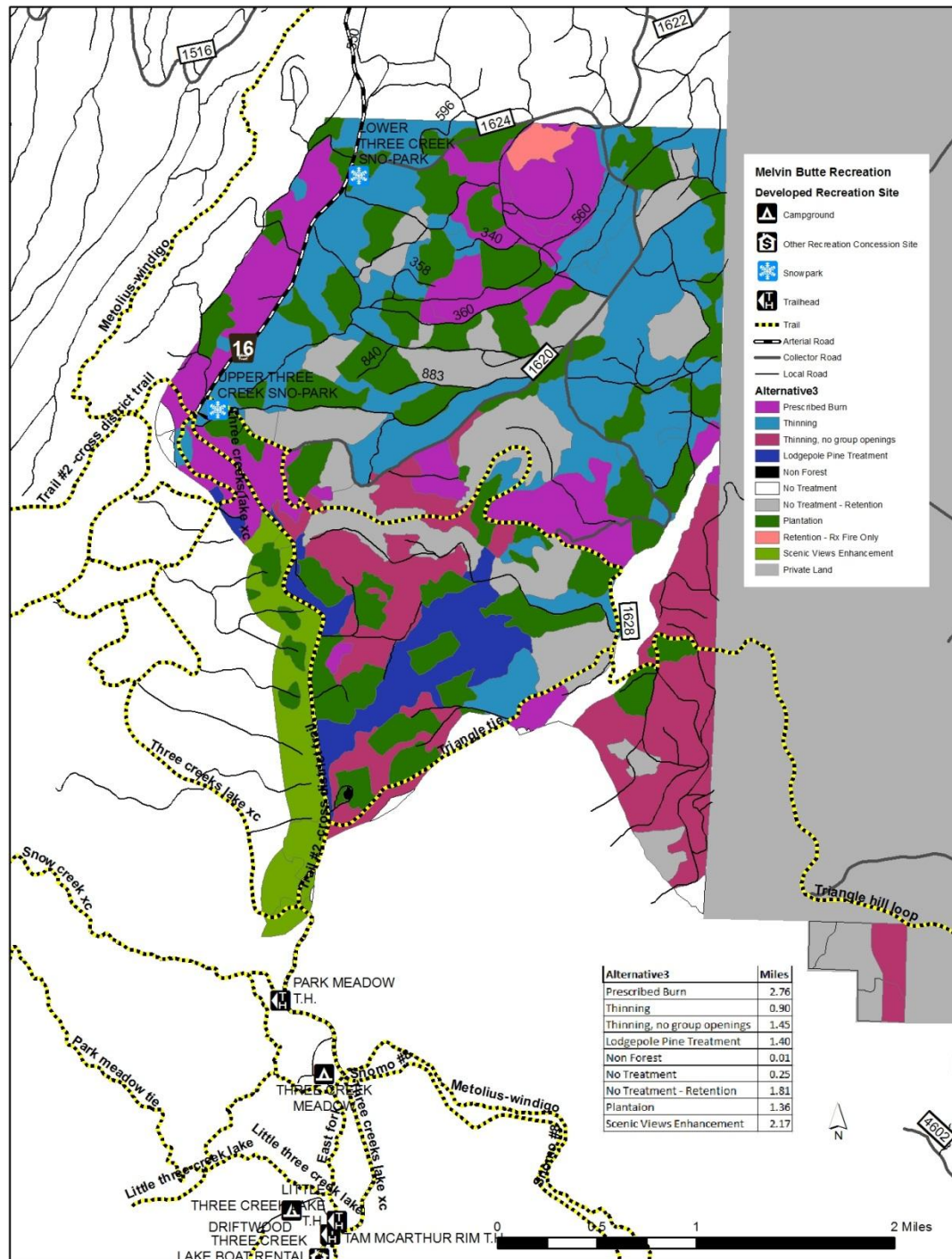
Special Use Permit	Type of Use	Season of Use	Associated Facilities
Three Sisters Backcountry	Outfitter & Guide, Yurt rental, snowmobile and XC Ski	October to May	Upper Three Creeks Sno-Park, FSR16, Cross-District Trail.
Recreation Events (differ year-to-year) Examples: *Boy Scout Freeze-O-Ree *Cascade Cycling Classic *Trainings *Adventure Race	Biking Youth Education Training		Upper and Lower Three Creeks Sno-Parks, FSR16

Map

Recreation Infrastructure within Melvin Butte Project Area, Melvin Butte Project Treatments - Alternative 2



Recreation Infrastructure within Melvin Butte Project Area, Melvin Butte Project Treatments - Alternative 3



Direct and Indirect Effects

Alternative 1 (No Action) Social Trends

No vegetation management activities would occur under the No Action alternative. There would be no change in current management direction or in the level of management activities. General recreational use and special use authorizations within the Melvin Butte project area would continually occur. The greatest threat to winter recreation trail and sno-park infrastructure would be from wildfire. The high risk of wildfire that exists within the area would not be reduced if no treatments are conducted. Wildfire could damage or destroy trail and facility infrastructure such as site identification features, restrooms, and trail markers.

Direct and Indirect Effects--Alternatives 2 and 3

The effects to recreation resources would be similar for alternatives 2 and 3 and are combined in this narrative, with any marked changes between the alternatives specifically described as needed.

Sno-Parks

The two developed sno-parks, Upper Three Creek Sno-Park and Lower Three Creek Sno-Park are located within Thinning or Plantation vegetation management units. This proposed thinning and fuel treatment would open up treated areas that could facilitate an increase in use, and unauthorized access, construction to, or expansion of dispersed campsites, trails, and roads. This is a concern at both sno-parks since unauthorized cross-country motorized travel is already occurring at the sno-parks. Mitigation measures to these effects are described in the Analysis Methods, Project Design Criteria section of this report.

Views would be opened adjacent to the sno-parks which may increase the satisfaction for visitors where views and forest access are improved. The aesthetic value surrounding the sno-parks would be changed by thinning and residual stumps and slash. Burning adjacent to the sno-parks would leave the area with affects from blackened ground vegetation and potential scorching of trees from pile burning.

Sno-parks would not be used for staging or landing areas, thus alleviating direct effects from such use. Access to the sno-parks by way of Forest Road 16, a haul route, could result in the direct effect of a temporary delay for forest visitors and increased truck traffic along the shared corridor. This will be mitigated by limited vegetation operations during weekends and holidays, and informing the public of timing and locations of treatments as described in the Analysis Methods, Project Design Criteria section of this report.

Winter Trails

Snowmobile and cross-county ski trails within the proposed project area include portions of the Cross-District trail, Triangle Hill Loop trail, Triangle Tie, and Three Creek Lake XC trail (total 10.55 miles).

Treatments along trails (units 4, 10, 12, 28, 31, 35, 39, 40, 41, 42, 44, 48, 49, 50, 56, 57, 72, 76, 85, 86, 87, 90, 108, 110, 113, 114) include thinning, pruning, mowing of shrubs, prescribed fire, and patch cuts. There is increased mixed-conifer group opening treatment near snowmobile trails in Alternative 2 (MCGO - 1.86 miles) where Alternative 3 has increased harvest thinning (HTH).

- Short-term effects (0 to 3 years) include evidence of treatment operations including painted trees and temporary roads. Evidence of ground disturbance such as log skidding and hauling and evidence of stumps is hidden by snow.
- Mid-term effects (3 to 10 years) include evidence of harvest operations and treatments. The effect to scenery would be most evident in group openings. In many cases, removal of vegetation provides new opportunities for snow play because the more open areas collect more snow and allow for easier access from the trails. The reduction of vegetation may also encourage off-highway vehicle users to illegally travel cross-country. Removal of dead and dying trees would benefit the scenic values throughout the area. Some areas would also benefit from expanded view sheds.
- Longer-term effect includes the reduced risk of catastrophic wildfire and invasive plants, improving overall forest health, would maintain the scenic quality surrounding these trails in the long-term.

Access: The most popular route, the Cross-District trail/Forest Road 16 would stay open during winter operations. Proposed haul routes are use Forest Road 1628 and Forest Road 1620. Snowmobilers and other winter users may be displaced from portions of the Triangle Tie (Forest Road 1628) and Triangle Hill Loop (Forest Roads 1620/300) snowmobile trails because these trails would be temporarily closed during hauling operations to increase public safety and reduce conflicts with recreationists. Due to the lower elevation, snow conditions on these trails can be poor and have received limited use. Grooming occurs by Forest volunteers although the Triangle Tie and Triangle Hill Loop trails have not been groomed in at least 4 years due to poor snow conditions. If the trail is closed in the winter, volunteers would not be able to groom the trail and snowmobilers would not be able to access the trail. Snowmobilers will be informed to use other open trail systems.

Dispersed Use/General Recreation Use

Although there are no inventoried dispersed campsites within the project area, camping is known to occur. If roads are closed during implementation, the closure would be temporary and campers would likely find alternate sites to use in the surrounding area, or ignore road closures and continue to access the sites with motorized vehicles. Decommissioning of campsites is not proposed; the sites would continue to be available for camping or be allowed to naturally return to an untrammelled condition. Logging traffic, chainsaw and timber felling noise, and smoke would likely disrupt recreational activities in the project area. This will be mitigated by informing the public of timing and locations of treatments as described in the Analysis Methods, Project Design Criteria section of this report.

Public access to the Three Creek Recreation Area (south of the project area) via Forest Road 16 would be allowed during the operational period. The indirect effect to recreationist utilizing this area may include the temporary delay and increased truck traffic along the Forest Road 16.

Special Use Permits

Three Sisters Backcountry, Inc outfitter and guide operation that stages at Upper Three Creek Sno-Park from October through May and may be impacted by sight and sound of hauling trucks passing on nearby roads or thinning operations surrounding the Sno-Park.

Effects to other existing Special Use permit holders and gatherers of special forest products would be similar to those of general recreational users. The most likely effects would be temporary travel delays along access routes which are also used as haul routes. Future requests for Special permits that would occur during vegetation management operations could be accommodated by authorization use in alternate locations, avoiding areas under temporary use restrictions, and/or informing the proponent of potential impacts to the proposed special use activity. Summer events may occur on the weekend or holidays when hauling would not occur.

Travel Management

Alternatives 2 and 3 would reduce the total miles of open system roads from 49.20 miles to 37.65 miles, a reduction of 11.55 miles. There is no inventoried or developed recreation infrastructure on or along these roads. The use of these roads for activities such as sight-seeing is unknown. Motorized vehicle recreationists will have less miles of road to travel on, and management activities would reduce the amount of area available to motorized access. This would result in a reduction of motorized routes on the Motor Vehicle Use Map designated 36 CFR 212.51. See the Transportation Analysis section for effects and mitigation measures.

Recreation Opportunity Spectrum

More than 99% of the project area is located within the ROS category Roaded Natural. The management actions proposed in Alternative 2 and 3 will not change the Roaded Natural recreational setting. Long term, the environment shall stay predominately natural appearing. Interaction among users may increase due the reduction of vegetation cover which increases visual range, dispersed camping opportunity, and cross-county travel (e.g., snowmobile use, hiking).

Cumulative Effects

Cumulative effects are associated with past, present, and future projects that overlap in time and space. The cumulative effects area for the recreation analysis is the boundaries of the Melvin Butte project area.

Cumulative Effects--Alternatives 2 and 3

Recreation use in the area is expected to grow as both population and the outdoor recreation based economy grows in central Oregon. With this increased use comes an increase in risk of human-caused fire. Past projects within and surrounding the project area have not resulted in large enough fuels treatments to reduce the high risk of wildfire. Without actions as proposed in alternatives 2 and 3, there is increased risk that these fires would be larger and burn more intensely, and impact recreation experience and infrastructure.

The existing condition (recreational physical setting) described earlier is a composite of completed and ongoing activities. Some of the ongoing activities of note are hazard tree removal

and maintenance at the sno-parks, grooming of the snowmobile trails, and ongoing administration of special permits which would not likely have a lasting effect on forest visitors.

The closure and decommissioning of approximately 11.55 miles of existing roads within the project area is also included in the proposed action. This proposal coupled with the Forest Travel Management plan which designate open roads and trails for motorized uses, would further reduce the amount of area available to motorized access and connected dispersed camping opportunities. Off-highway vehicle enthusiasts would likely use alternate routes or ignore restoration efforts on closed roads. Proposed closures would likely result in the dissatisfaction of some visitors that once used the roads for dispersed camping, hunting, gathering of forest products, or other recreational activities.

Proposed and approved projects adjacent to the Melvin Butte project area include Ursus vegetation project that may displace snowmobilers and other winter users from snowmobile Trail #8 and Triangle Hill #88 during operations. Winter recreationists use the Triangle Tie Trail (in the project area) to access Triangle Loop Trail #88 on the Bend-Fort Rock Ranger District south of the project area (via private property). Depending on the Melvin Butte and Ursus implementation operations timeframe, temporary snowmobile trail closures within the same region may occur. The snowmobile trails impacted are low use due to snow conditions. Forest visitors who recreate within the project area may choose alternate locations during implementation. Cumulatively, in the longer term, reduction of forest densities typically would enhance winter recreation opportunities – both motorized and non-motorized.

Conclusion

Direct and indirect effects to forest visitors of Alternative 2 and 3 would occur due to the presence of machinery, which would create added noise, dust, possible traffic delays, and visual evidence such as marked trees and skid trails. Snowmobilers and other winter users may be displaced from portions of the Triangle Tie (FSR1628) and Triangle Hill Loop (1620/300) snowmobile trails because these trails would be temporarily closed during hauling operations. Short-term impacts to Three Sisters Backcountry, Inc. outfitter and guide operation may also occur at the Upper Three Creek Sno-Park staging area due to the sight and sound of hauling trucks passing on nearby roads, or implementation operations surrounding the Sno-Park.

Cumulatively, the effects of the proposed action are not likely to have a long-term adverse effect to forest visitors accessing the area, or in the recreational experience they seek when coming to or travelling through the area. While access to snowmobile trails may be affected in the short-term depending on the project length of operations, this would not have an adverse effect far into the future. The spatial effects of the projects which relate to scenery, recreation use, and experience, would be positive effects in the long-term, as the area would experience improved forest health. Reduction in forest densities typically also enhances winter recreation opportunities and dispersed camping opportunities. Increased cross-country travel by forest visitors may occur with reductions in forest densities. Removal of hazard trees near sno-parks would increase visitor safety. The Forest Plan standards and guidelines would be met through the project design criteria.

LITERATURE CITED

Clark, Roger N., and George H. Stankey, 1979. Determining the acceptability of recreation impacts: An application of the Outdoor Recreation Opportunity Spectrum. In Proceedings of the Wildland Recreation Impacts Conference, October 27-29, 1978, Seattle, Wash. Ruth Ittner, Dale R. Potter, and James K. Agee, eds. USDA For. Serv. and Natl. Park Serv., Pac. Northwest Reg.

Deschutes Land Resource Management Plan

Forest Service Manual, FS2332 – Safety Provisions on National Forests System Developed Sites